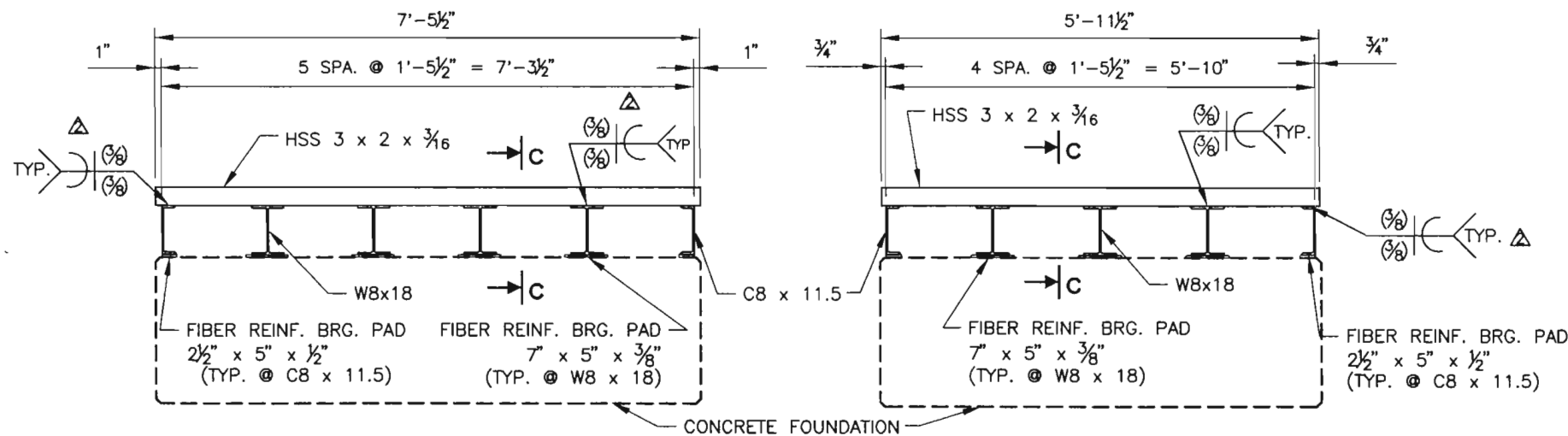


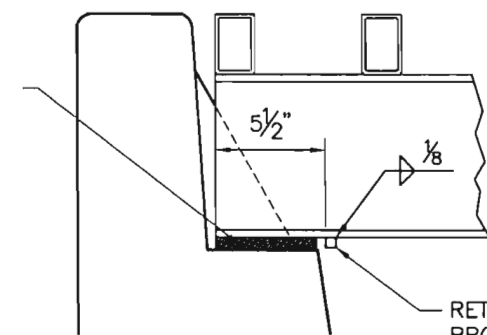
PLAN VIEW - TYPICAL GRID UNITS



SECTION a-a

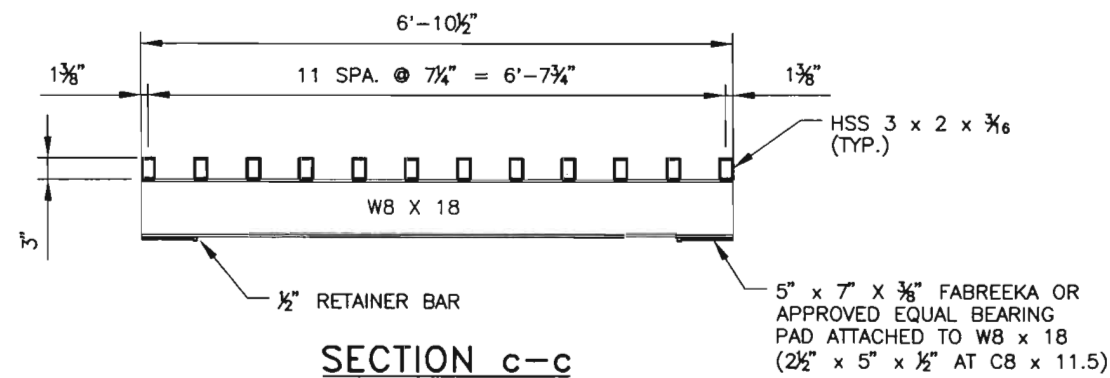
SECTION b-b

FABREKA BEARING PAD (OR APPROVED EQUAL) (EPOXY TO W8 & C8) TYPICAL



RETAINER BAR 1/2" SQ. x BRG. PAD WIDTH (WELD TO W8 & C8 - TYP.)

BEARING PAD DETAILS CONCRETE FOUNDATION



SECTION c-c

GENERAL NOTES:

- DESIGN AND CONSTRUCTION SHALL CONFORM TO THE NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, SUPPLEMENTAL SPECIFICATIONS, AND SPECIAL PROVISIONS, CURRENT EDITION.
- STEEL STRUCTURES SHALL CONFORM TO SECTION 541 - STEEL STRUCTURES OF THE STANDARD SPECIFICATIONS AND AASHTO M270, GRADE 36. TUBING SHALL CONFORM TO ASTM A500, GRADE B.
- BOLTS, NUT, AND WASHERS SHALL BE GALVANIZED TO MEET THE REQUIREMENTS OF AASHTO M111 OR AASHTO M298.
- WELDING SHALL MEET THE REQUIREMENTS OF THE ANSI/AWS 1.1 STRUCTURAL WELDING CODE, AND SECTION 541 OF THE STANDARD SPECIFICATION.
- THE FABRICATOR SHALL FURNISH TO THE BRIDGE ENGINEER SIX COPIES OF MILL TEST REPORTS OF ALL STRUCTURAL STEEL ITEMS, WELDING ELECTRODES, AND FLUX COMBINATIONS IN CONFORMANCE WITH SUBSECTION 541.323 OF THE STANDARD SPECIFICATIONS.
- PAINTING OR STRUCTURAL STEEL SHALL CONFORM TO SECTION 545 OF THE STANDARD SPECIFICATIONS. COLOR SHALL BE "SAFETY YELLOW".
- THE LENGTH OF THE WING SUPPORT POSTS SHALL PROVIDE A MINIMUM OF TWO FEET OF SOIL PENETRATION.
- PROVIDE FOUNDATION MATERIALS AND COMPACTION AS SHOWN ON PLAN DETAILS AND SECTION 610 AND 207 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR MAY SUBSTITUTE FLOWABLE FILL FOR THE SUBGRADE PREPARATION SHOWN. THE ALIGNMENT OF THE BASE UNITS SHALL BE SUCH THAT THE ENDS OF THE GRID SUPPORT BEAMS AND CHANNELS BEAR EVENLY ON THE BASE SUPPORT STRUCTURES. CONTRACTOR SHALL VERIFY THAT FOUNDATION SOILS ARE CAPABLE OF SUPPORTING 4000 PSF BEARING PRESSURE. IF ALLOWED BY THE PROJECT MANAGER, SOILS INCAPABLE OF SUPPORTING 4000 PSF BEARING PRESSURE SHALL BE SUBEXCAVATED 4 FT. WIDE x 1 FT. DEEP x LENGTH OF FOUNDATION AND REPLACED WITH AASHTO A-1a MATERIAL COMPACTED TO 100% OF MAXIMUM DENSITY.
- THE CONTRACTOR SHALL SLOPE THE BASES OF THE CATTLE GUARDS AS REQUIRED TO PROVIDE ROADWAY CROWNS OR SUPERELEVATION.

CATTLE GUARD STEEL GRID WIDTHS

ROADWAY WIDTH	SUGGESTED SECTIONS
10'-0"	12'-0" (2 - 6'-0" END UNITS)
12'-0"	12'-0" (2 - 6'-0" END UNITS)
14'-0"	15'-0" (2 - 7'-6" END UNITS)
16'-0"	19'-6" (2 - 6'-0" END UNITS AND 1 - 7'-6" INTERMEDIATE UNIT)
18'-0"	19'-6" (2 - 6'-0" END UNITS AND 1 - 7'-6" INTERMEDIATE UNIT)
24'-0"	27'-0" (2 - 6'-0" END UNITS AND 2 - 7'-6" INTERMEDIATE UNITS)
30'-0"	30'-0" (2 - 7'-6" END UNITS AND 2 - 7'-6" INTERMEDIATE UNITS)
32'-0"	34'-6" (2 - 6'-0" END UNITS AND 3 - 7'-6" INTERMEDIATE UNITS)
36'-0"	37'-6" (2 - 7'-6" END UNITS AND 3 - 7'-6" INTERMEDIATE UNITS)
42'-0"	42'-0" (2 - 6'-0" END UNITS AND 4 - 7'-6" INTERMEDIATE UNITS)
48'-0"	49'-6" (2 - 6'-0" END UNITS AND 5 - 7'-6" INTERMEDIATE UNITS)

NO.	DATE	REV. BY	DESCRIPTION
Δ	04/10/08	TM	CHANGE SPACING DIMENSION
Δ	07/18/07	TM	CHANGE WELDING SIZE
Δ	11/9/06	TM	GENERAL REVISIONS/DELETE STEEL FRAMES

REVISIONS (OR CHANGE NOTICES)

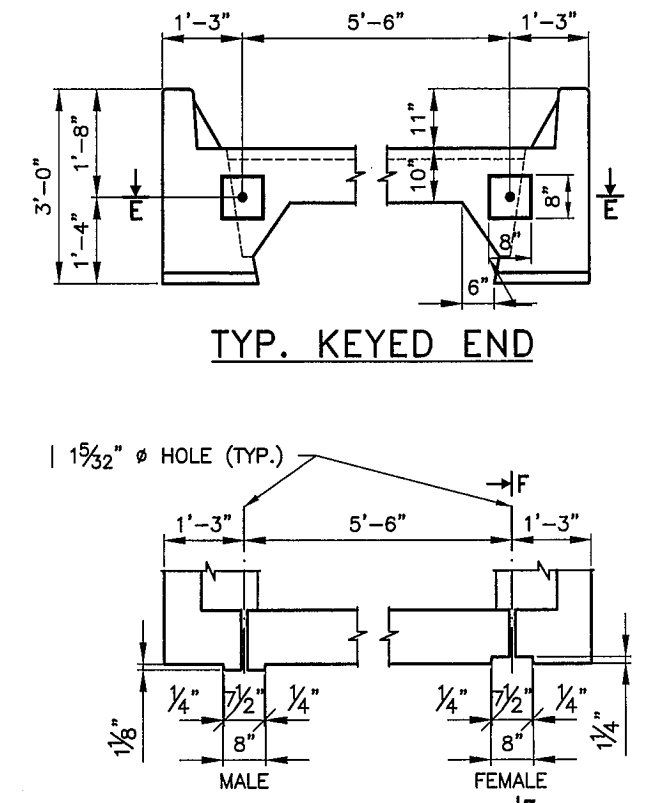
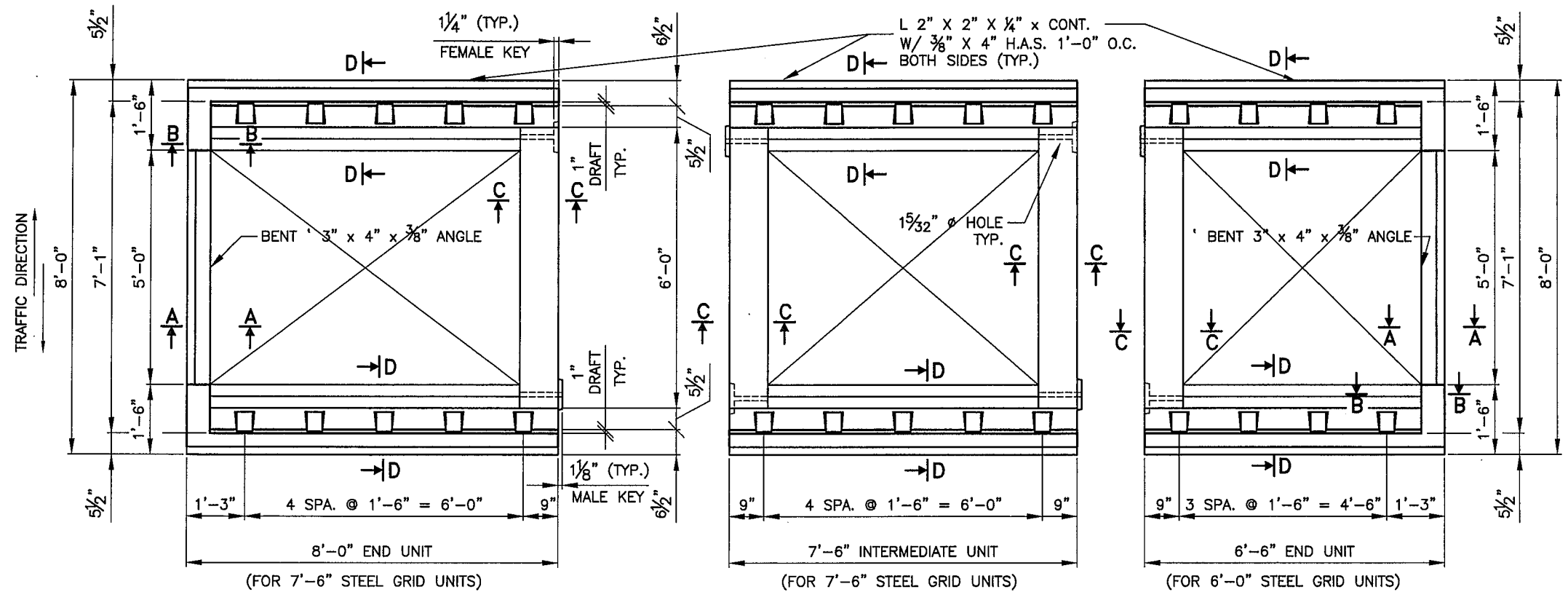
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

6'-0" AND 7'-6" STEEL GRIDS OF CATTLE GUARDS

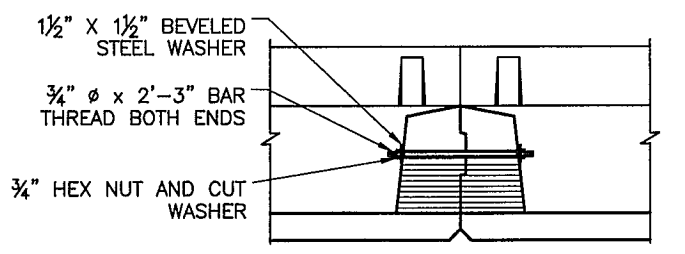
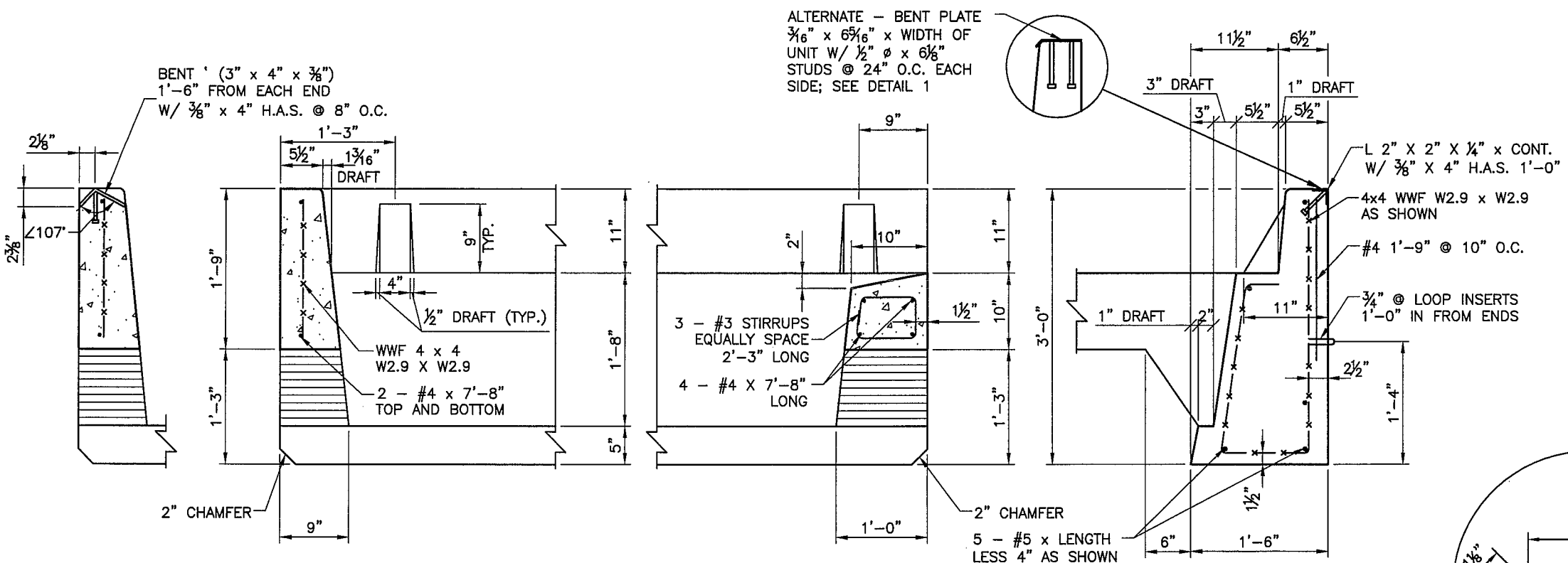
APPROVED: *T.M. Tilled* 4/14/08
DESIGN ENGINEER DATE

DESIGNED BY T.M. DRAWN BY SKL CHECKED BY YML

610-01-1/3



PLAN VIEWS OF FOUNDATION UNITS



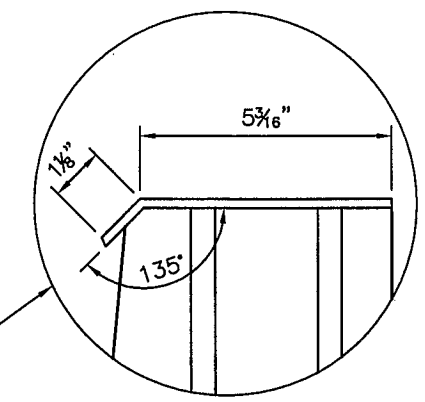
SECTION A-A

SECTION B-B

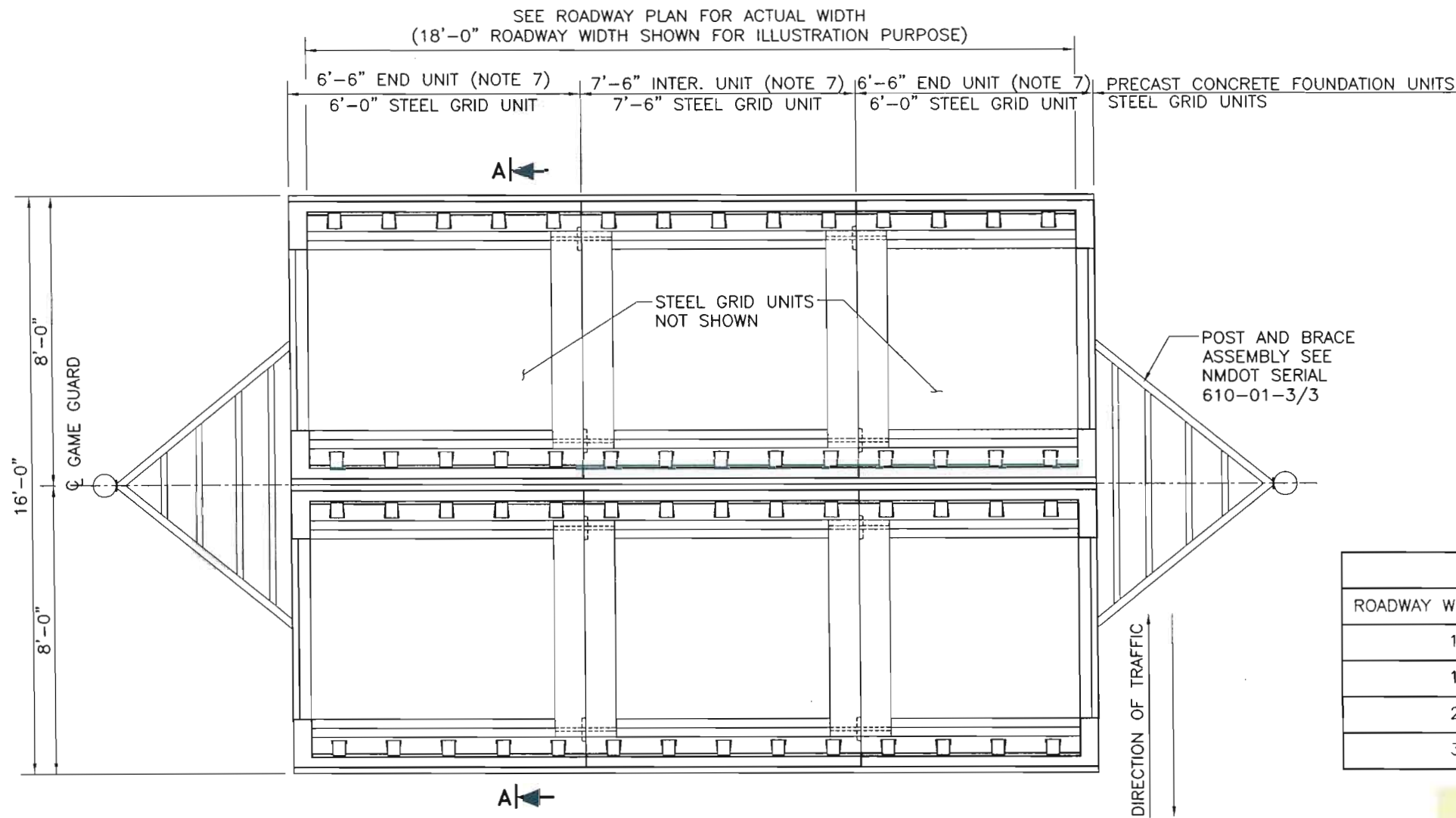
SECTION C-C

SECTION D-D

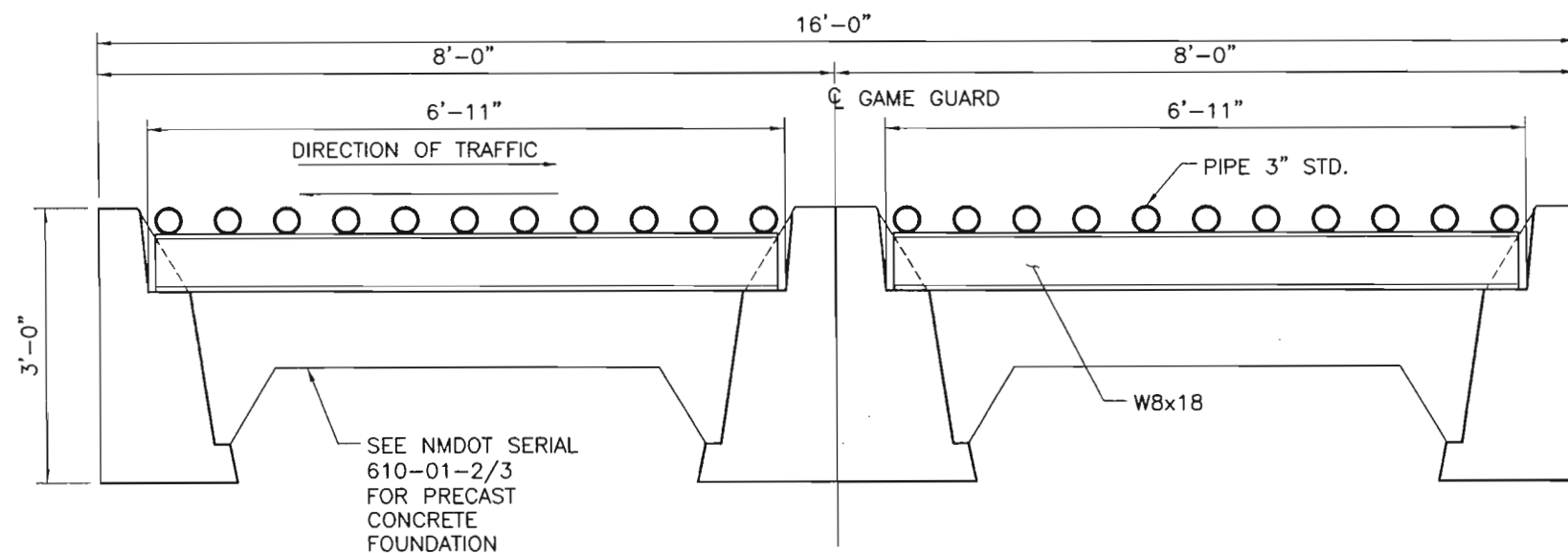
DETAIL 1



NO.	DATE	REV. BY	DESCRIPTION
△	08/21/07	TM	ADDED DETAIL 1
△	11/9/06	TM	GENERAL REVISIONS/DELETE STEEL FRAMES
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
PRECAST CONCRETE FOUNDATION OF CATTLE GUARD			
APPROVED	DESIGN ENGINEER		8-30-07 DATE
DESIGNED BY T.M. DRAWN BY SKL CHECKED BY YML			
610-01-2/3			



GAME GUARD PLAN



SECTION A-A

GENERAL NOTES:

- DESIGN AND CONSTRUCTION SHALL CONFORM TO THE NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, SUPPLEMENTAL SPECIFICATIONS, AND SPECIAL PROVISIONS, CURRENT EDITION.
- STEEL STRUCTURES SHALL CONFORM TO SECTION 541 - STEEL STRUCTURES OF THE STANDARD SPECIFICATIONS AND AASHTO M 183, PIPE SHALL CONFORM TO ASTM A 53.
- BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED TO MEET THE REQUIREMENTS OF AASHTO M 111 OR AASHTO M 298.
- WELDING SHALL MEET THE REQUIREMENTS OF THE ANSI/AWS D 1.1 STRUCTURAL WELDING CODE, AND SECTION 541 OF THE STANDARD SPECIFICATIONS.
- PAINTING OF STRUCTURAL STEEL SHALL CONFORM TO SECTION 545 OF THE STANDARD SPECIFICATIONS. COLOR SHALL BE "SAFETY YELLOW".
- WHEN GAME GUARD IS TO BE INSTALLED IN IMPERVIOUS MATERIAL, ADEQUATE DRAINAGE SHALL BE PROVIDED TO INSURE AGAINST POSSIBLE SUBGRADE DAMAGE. DRAINAGE DETAILS SHALL BE AS SHOWN ON PROJECT PLANS.
- SEE SERIAL 610-01-2/3 FOR PRECAST CONCRETE FOUNDATION.
- DESIGN DATA:
DESIGN IS IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATION 2007 AND CURRENT INTERIM REVISION THROUGH 2009.
DESIGN LOADS: HS20 AND DESIGN TANDEM WITH 33% IMPACT.

GAME GUARD STEEL GRID WIDTHS	
ROADWAY WIDTHS (BID ITEM)	REQUIRED STEEL SECTIONS
14'-0"	15'-0" (4 - 7'-6" END UNITS)
18'-0"	19'-6" (4 - 6'-0" END UNITS AND 2 - 7'-6" INTERMEDIATE UNIT)
24'-0"	27'-0" (4 - 6'-0" END UNITS AND 4 - 7'-6" INTERMEDIATE UNIT)
32'-0"	34'-6" (4 - 6'-0" END UNITS AND 6 - 7'-6" INTERMEDIATE UNIT)

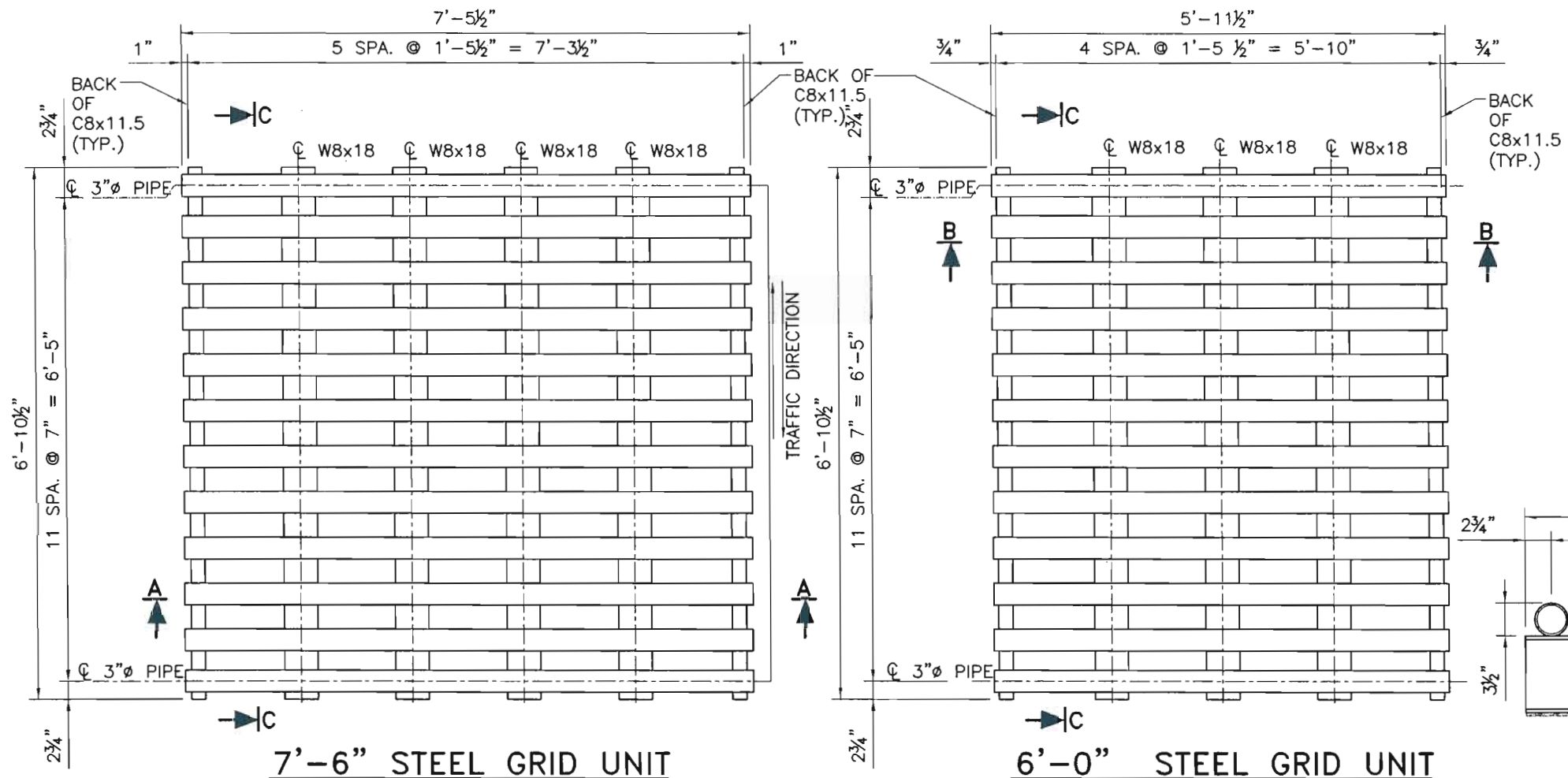
Bid items

NOTE: SERIAL 610-01-1/3 THRU 610-01-3/3 MUST ACCOMPANY THIS SHEET

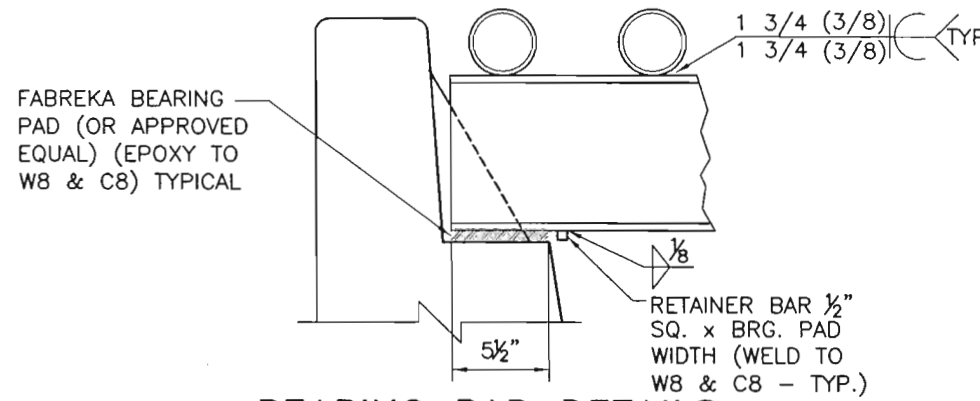


8-18-09

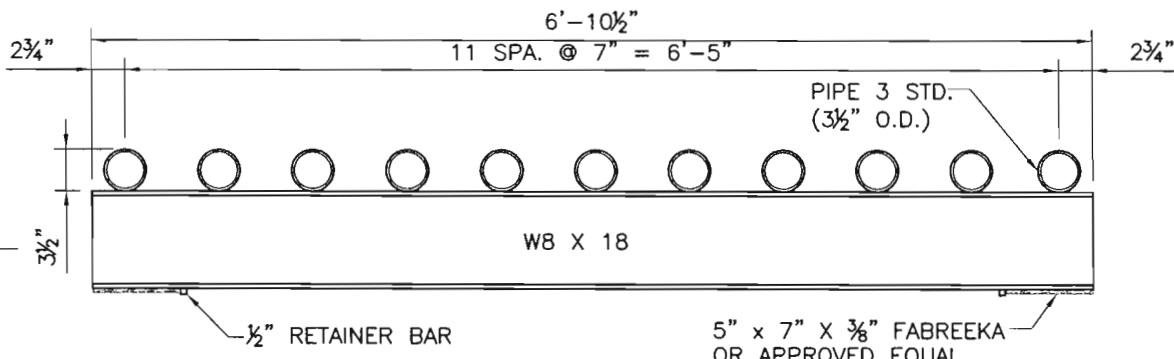
NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
GAME GUARD PLAN & ELEVATION			
DESIGNED BY RP DRAWN BY KM CHECKED BY LF			
610-02-1/2 1/2			



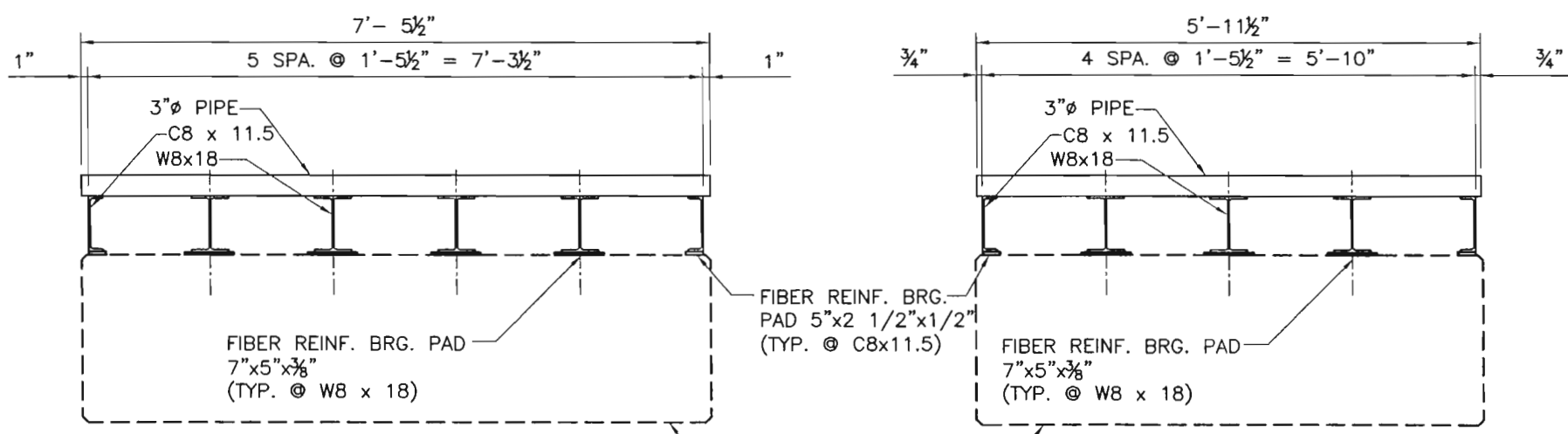
7'-6" STEEL GRID UNIT 6'-0" STEEL GRID UNIT
 PLAN VIEW - TYPICAL GRID UNITS



BEARING PAD DETAILS
 CONCRETE FOUNDATION



SECTION C-C



SECTION A-A

SECTION B-B

PRECAST CONCRETE FOUNDATION SEE SERIAL 610-01-2/3



NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
GAME GUARD 6'-0" & 7'-6" STEEL GRIDS			
DESIGNED BY <u>RP</u> DRAWN BY <u>KM</u> CHECKED BY <u>LF</u>			
610-02-2/2			